

life in space, compared to one or two years now. Canada has the technology, with some U.S. aid, to be in this field in its very early stages of development, he said.

- F. R. LaFlamme, Air Canada's manager of freight sales, said Calgary will be served by an all-cargo jet flight three times a week starting in November. The DC-8 flight will touch down at Vancouver, Calgary, Toronto and Montreal on its route to Europe and will mean Air Canada must spend \$100,000 on expanding its Calgary freight handling facilities.

- Jean Paul Bradshaw, chairman of Ozark Airlines: Calgary needs and could support a daily air flight to Chicago, St. Louis and Tulsa. Ozark intends to apply for one in June before the Civil Aeronautics Board in Washington, he told the convention. He said he would like to extend the route to Anchorage, Alaska.

- Gordon McGregor, Air Canada president, who announced his retirement effective May 31, said the Anglo-French Concorde SST (supersonic transport) would fly in October. He predicted a major setback for the U.S. version of the SST because of a weight problem.

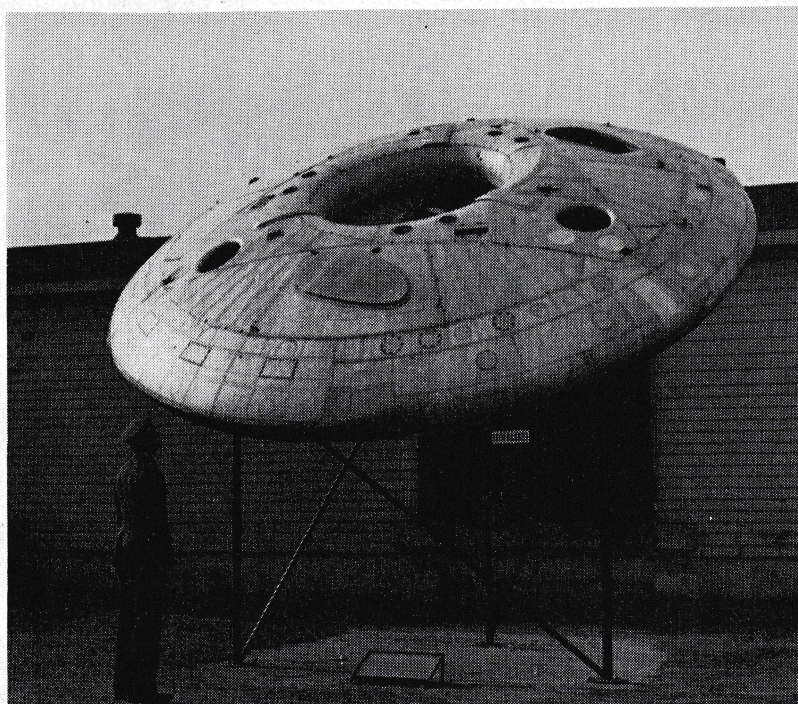
Other principal speakers and panelists:

Airports of the Future — Design requirements, ground equipment, problems of high density traffic, passenger and baggage handling. Moderator — J. M. Pierce, President of Ranger Oil Ltd., Calgary. Panelists — Dennis R. Hemming, Chief of Planning, Research and Development Division of the Department of Transport; Edward R. Wilbee, Partner in charge of Mechanical and Electrical Engineering of John B. Parkin and Associates, the internationally-known Toronto airport architects; Thomas H. Mullen, Manager of Special Product Development, Commercial Airplane division, The Boeing Company, Seattle.

Utilization and Advantages of Helicopters in Business — Capabilities in exploration for petroleum and other minerals, passenger service and remote construction projects: Moderator — D. Bruce Bullock, General Manager of the Bullock Wings and Rotors Company, Calgary. Panelists — Glen McPherson, Vice-President of the Helicopter Association of America, Chairman Air Transport Association of Canada; E. E. Gustafson, Marketing Manager, Sikorsky Aircraft, Stratford, Connecticut; A. D. Haight, Lockheed Aircraft, Los Angeles. A Shell Oil Company film outlined "Historical Development of the Helicopter Concept."

Air Passenger Service — Equipment priority, air charter service, scheduling techniques, passenger requirements of the future, international agreements: Moderator — R. J. Culkin, President, Travacon Research Ltd., Calgary. Panelists — Nathan S. Simat; M. W. Ward, President Wardair Canada Ltd., Edmonton; Claude Taylor, General Manager, Marketing Services, Air Canada; G. W. Morisset, Chairman, Air Transport Commission, Ottawa.

Air Freight Distribution for Profit — Distribution to remote areas, automatic computer controlled and containerized handling, rate comparison and special case examples: Moderator — Robin Abercrombie, Manager, Independent Petroleum Association of Canada. Panelists — R. D. Keiser, Assistant Director of Marketing of the Flying Tiger Line Inc., Los Angeles; F. R. LaFlamme, Air Canada; B. S. Frassetto, Vice-President of Engineering, Dorteck Inc., Stamford, Connecticut; Kenneth Razzell, Director of Sales Service, Canadian Pacific Airlines; J. N. Methen, Vice-President and General Manager of Johnson Terminals Limited, Vancouver; W. R. Harris, Vice-President and General Manager, Pacific Western Airlines.



AVRO SAUCER on display — less canopy.

Avro "saucer" is museum piece

- Whatever happened to the Avro Flying Saucer? It wound up at the US Army Transportation Museum at Fort Eustis, Virginia.

According to the descriptive plaque displayed alongside the disc-shaped vehicle, which is given pride of place at the entrance to the museum, it was built by a manufacturer in South Bend, Indiana. But a leaflet obtainable at the museum gives a roughly correct description, identifying it as "The only flying saucer in captivity . . . one of two Avro-cars built in Canada . . . which was an experimental step in the development of a vertical takeoff and landing craft. A joint venture of the US and Canada, the car was tested in California during 1960, during which it flew no higher than four feet off the ground. It was operated by three gas turbines located in the center of the vehicle."

The museum, which apparently received the vehicle after Ames Research Center had discarded it, has always viewed it as something of a curiosity. A Canadian tourist, an ex-Avro man, who stumbled across it recently, helped the officers who act as curators of the museum delve through the mass of technical literature that was received with the vehicle. They promised to correct and amplify the descriptive plaque. Anybody sufficiently interested is also permitted to view movie films taken during the experimental program.

The Avro "Flying Saucer" never did justify the name. It was a limited technical success, operating without difficulty as a ground effect machine but never taking to the air as a true aircraft. It did not have enough power to sustain itself in true flight. And wind-tunnel tests revealed that even if it had been adequately powered, it would have had serious stability problems in forward motion at high speeds.

Nevertheless, the vehicle was an intriguing, if expensive, exercise in unorthodox aerodynamics. It deserves a better fate than to be exhibited in a relatively obscure museum alongside old steam locomotives, tank-landing craft and other types of military vehicle.

Perhaps the aviation museum in Ottawa, or the new Toronto centre of science and technology should negotiate for it? It would make a worthwhile addition to either collection.